

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

GREAT LAKES NATIONAL PROGRAM OFFICE 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

OCT 9 2009

AE-17J

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. John Ambrose President Rentech Energy Midwest Corporation 16675 Highway 20 West East Dubuque, Illinois 61025-0229

Re: Notice and Finding of Violation issued to Rentech Energy Midwest Corporation

Dear Mr. Ambrose:

The United States Environmental Protection Agency (U.S. EPA) is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Rentech Energy Midwest Corporation (you) under Section 113(a)(1), 42 U.S.C. § 7413(a)(1), of the Clean Air Act (the Act). We find that you are in violation of the New Source Performance Standards (NSPS) for Nitric Acid Plants, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subpart G; the Prevention of Significant Deterioration (PSD) requirements in Subtitle I, Part C of the Act, 42 U.S.C. §§ 7470-7479, and the implementing regulations at 40 C.F.R. Part 52; the Title V Permit Program requirements of the Act at 42 U.S.C. §§ 7661a-7661f, and the implementing regulations at 40 C.F.R. Part 70; and the Illinois State Implementation Plan and the corresponding federal requirements in Section 110 of the Act, 42 U.S.C. § 7410, at your facility located at 16675 Highway 20 West, East Dubuque, Illinois.

Section 113 of the Act, 42 U.S.C. § 7413, gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial, civil, or criminal action. The options we select may depend on, among other things, the length of time you take to achieve and demonstrate continuous compliance with the rules cited in the NOV/FOV.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent

future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The U.S. EPA contact in this matter is Michelle Heger. You may call her at (312) 886-4510 to request a conference. You should make the request as soon as possible, but no later than 10 calendar days after you receive this letter. We should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

Cheryl L. Newton

Director

Air and Radiation Division

Enclosure

cc: Ray Pilapil, Manager

Bureau of Air, Compliance and Enforcement Section

Illinois Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
Rentech Energy Midwest Corporation East Dubuque, Illinois) NOTICE AND FINDING OF) VIOLATION
Proceedings pursuant to Section 113(a)(1),42 U.S.C. § 7413(a)(1), of the Clean Air Act) EPA-5-09-IL-20))

NOTICE AND FINDING OF VIOLATION

The United States Environmental Protection Agency (U.S. EPA) is issuing this Notice and Finding of Violation (NOV/FOV) under Section 113(a)(1) of the Clean Air Act (Act), 42 U.S.C. § 7413(a)(1). U.S. EPA finds that Rentech Energy Midwest Corporation (REMC), at its facility located at 16675 Highway 20 West, East Dubuque, Illinois, is violating the New Source Performance Standards (NSPS) for Nitric Acid Plants, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subpart G; the Prevention of Significant Deterioration (PSD) requirements in Subtitle I, Part C of the Act, 42 U.S.C. §§ 7470-7479, and the implementing regulations at 40 C.F.R. Part 52; the Title V Permit Program requirements of the Act at 42 U.S.C. 42 U.S.C. §§ 7661a-7661f, and the implementing regulations at 40 C.F.R. Part 70; and the Illinois State Implementation Plan (SIP) and the corresponding federal requirements in Section 110 of the Act, 42 U.S.C. § 7410 as follows:

A. STATUTORY AND REGULATORY BACKGROUND

NSPS for Nitric Acid Plants, Subpart G

- 1. On June 14, 1974, 39 Fed. Reg. 20794, U.S. EPA promulgated the Standards of Performance for Nitric Acid Plants at 40 C.F.R. Part 60, Subpart G (Nitric Acid NSPS).
- 2. An affected facility under the Nitric Acid NSPS, 40 C.F.R. § 60.70, is any nitric acid production unit which commences construction or modification after August 17, 1971.
- 3. The Nitric Acid NSPS at 40 C.F.R. § 60.72(a)(1) prohibits any affected nitric acid plant from emitting nitrogen oxides (NOx) in excess of 1.5 kilograms per metric ton of acid produced (kg/ton) (3.0 pounds per ton of acid produced (lbs/ton)), the production being expressed as 100 percent nitric acid.

Prevention of Significant Deterioration

- 4. Subchapter I, Part C of the Act, 42 U.S.C. §§ 7470-7479, prohibits construction of a major emitting facility after August 7, 1977, unless a PSD permit has been issued for the facility, Best Available Control Technology (BACT) has been applied to that facility, there has been an analysis of any air quality impacts projected due to the growth of the proposed facility, and that the person who owns or operates the proposed facility agrees to conduct such monitoring as may be necessary to determine the effect of any emissions if the facility is located in an area which has either achieved the National Ambient Air Quality Standards (NAAQS) for that pollutant, or has been designated as unclassifiable for that pollutant.
- 5. On June 19, 1978, 43 Fed. Reg. 26403, U.S. EPA promulgated the prevention of significant deterioration of air quality standards pursuant to Subtitle I, Part C of the Act, 42 U.S.C. §§ 7470-7479. These regulations were revised on August 1, 1980, 45 Fed. Reg. 52676, and are codified at 40 C.F.R. § 52.21 (PSD regulations).
- 6. Subchapter I, Part C of the Act, 42 U.S.C. §§ 7470-7479, and the implementing regulations at 40 C.F.R. § 52.21, prohibit constructing a major stationary source or making a major modification to a stationary source without first obtaining a PSD permit if the source is located in an area which has either achieved the NAAQS for that pollutant, or has been designated as unclassifiable for that pollutant.
- 7. The PSD regulations in effect in 1978, and currently, define "major stationary source" at 40 C.F.R § 52.21(b)(1)(i) and (b)(1)(a), respectively, as "any of the following sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any air pollutant regulated under the Clean Air Act: . . . hydrofluoric, sulfuric, and nitric acid plants"
- 8. The 1978 PSD regulations at 40 C.F.R § 52.21(b)(2), define "major modification," in part as, "any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant regulated under the act (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since August 7, 1977, or since the time of the last construction approval issued for the source pursuant to this section, whichever time is more recent, regardless of any emission reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section"
- 9. The PSD regulations currently in effect define "major modification" at 40 C.F.R § 52.21(b)(2)(i) as "any physical change in or change in the method of operation of a major stationary source that would result in significant net emissions increase of any pollutant subject to regulation under the Act."

- 10. The PSD regulations currently in effect define "significant" at 40 C.F.R § 52.21(b)(23)(i), as "a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed . . . [40 tons per year of nitrogen oxides]."
- 11. The 1978 and current PSD regulations at 40 C.F.R § 52.21(i) prohibit construction of a major stationary source or major modification unless the requirements of 40 C.F.R. § 52.21(j) through (r) have been met.
- 12. The 1978 and current PSD regulations at 40 C.F.R. § 52.21(j) through (r) require, among other things, that the proposed facility be subject to the BACT for each pollutant subject to regulation, that there be an analysis of any air quality impacts projected due to the growth of the proposed facility, and that the person who owns or operates the proposed facility agree to conduct such monitoring as may be necessary to determine the effect of any emissions.

Illinois SIP PSD Requirements

- 13. Under Section 110(a) of the Act, 42 U.S.C. § 7410, each SIP must include a permit program to regulate the modification and construction of any stationary source of air pollution as necessary to assure that NAAQS are achieved. These plans are required to include enforceable emission limitations, control measures, and schedules for compliance. As stated under Section 113(a) of the Act, 42 U.S.C. § 7413(a), upon U.S. EPA's approval of a SIP, the plans become independently enforceable by the federal government.
- 14. On June 19, 1978, 43 Fed. Reg. 26380, 26410, as amended at 45 Fed. Reg. 52676, 52741 (August 7, 1980) and 46 Fed. Reg. 9580 (January 29, 1981), U.S. EPA found that the Illinois SIP provisions to implement the PSD regulations did not meet the requirements of Sections 160 through 165 of the Act, 42 U.S.C. §§ 7470- 7475, and therefore, the Federal PSD regulations at 40 C.F.R. §§ 52.21(b) through (v) were incorporated and made part of the Illinois SIP at 40 C.F.R. § 52.738. On January 29, 1981, 46 Fed. Reg. 9580, the Illinois Environmental Protection Agency was delegated the authority to issue PSD permits.

Requirements for Title V Operating Permits

15. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), provides that no source may operate without a Title V permit after the effective date of any permit program approved or promulgated under Title V of the Act. On July 21, 1992, 57 Fed. Reg. 32295, U.S. EPA first promulgated regulations governing state operating permit programs at 40 C.F.R Part 70 (Title V regulations).

- 16. Section 503(b) of the Act, 42 U.S.C. § 7661b(b), requires that the Title V regulations include a requirement that "the applicant submit with the permit application a compliance plan describing how the source will comply with all applicable requirements"
- 17. Section 504(a) of the Act, 42 U.S.C. § 7661c(a), requires that each Title V permit include enforceable emission limitations and standards, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a state implementation plan.
- 18. The Title V regulations at 40 C.F.R. § 70.1(b) provide that: "[a]ll sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements."
- 19. The Title V regulations at 40 C.F.R § 70.2 define "applicable requirement" to include
 - (1) [a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act, including revisions to that plan promulgated in part 52 of this chapter . . . ; (2) [a]ny term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act
- 20. The Title V regulations at 40 C.F.R. § 70.1(b) provide that no source subject to 40 C.F.R. Part 70 requirements may operate, except in compliance with a permit issued under a Part 70 program.
- 21. The Title V regulations at 40 C.F.R. § 70.5(a) and (c) require timely and complete Title V permit applications.
- 22. The Title V regulations at 40 C.F.R. § 70.5(c)(4)(i) require that the standard application shall include, "[c]itation and description of all applicable requirements."
- 23. The Title V regulations at 40 C.F.R. § 70.5(c)(8) require that the standard application shall include:
 - [a] compliance plan for all part 70 sources that contains all the following:
 - (i) A description of the compliance status of the source with respect to all applicable requirements.
 - (ii) A description as follows:

- (A) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.
- (B) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis.
- (C) For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements.
 - (iii) A compliance schedule as follows:
- (A) For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.
- (B) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A statement that the source will meet in a timely manner applicable requirements that become effective during the permit term shall satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement.
- (C) A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- 24. The Title V regulations at 40 C.F.R. § 70.5(b) provide that, "[a]ny applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information"
- On March 7, 1995, 60 Fed. Reg. 12478, U.S. EPA promulgated interim approval of the Illinois Title V program. On December 4, 2001, 66 Fed. Reg. 62946, U.S. EPA promulgated final approval of the Illinois Title V program and the program became effective on that November 30, 2001.

B. FACTUAL BACKGROUND

26. REMC owns and operates a nitrogen production plant located at 6675 Highway 20 West in East Dubuque, Illinois (the East Dubuque Nitrogen Production Plant).

- 27. At the East Dubuque Nitrogen Production Plant, there are several different manufacturing processes, including, one unit for ammonia production, another unit for urea production, and two production units for the manufacture of nitric acid.
- 28. The East Dubuque Nitrogen Production Plant was originally constructed in 1964 by the Northern Illinois Gas Company. The plant and associated property was under the corporate name of Apple River Chemical Co., a subsidiary of Northern Illinois Gas Company.
- 29. In 1970, St. Paul Ammonia Products purchased the assets of Apple River Chemical Co., including the East Dubuque Nitrogen Production Plant.
- 30. In 1975, St. Paul Ammonia Products was merged into N-Ren Corporation (N-Ren), a Delaware corporation with its principal place of business in Cincinnati, Ohio.
- 31. On March 2, 1978, N-Ren submitted a construction application permit to the IEPA to construct the #1 Nitric Acid Production Plant.
- 32. On May 3, 1978, IEPA issued a construction permit to N-Ren for construction of the #1 Nitric Acid Production Plant.
- 33. Construction on the #1 Nitric Acid Production Plant began in July, 1978.
- 34. In January 1987, N-Ren filed for Chapter 11 bankruptcy and the East Dubuque Nitrogen Production Plant assets were auctioned to an investment group comprised of Sullivan and Proops and Great American Management Inc. The asset purchase was transferred into the legal entity of Phoenix Chemical Company. This ownership group later became the Vigoro Corporation, a U.S. publicly traded company.
- 35. On January 2, 1996, Phoenix Chemical Company submitted the initial Title V permit application for the East Dubuque Nitrogen Production Plant.
- 36. On September 19, 1996, following the merger of the Vigoro Corporation into IMC Global Inc., the name, ownership and operation of the East Dubuque Nitrogen Production Plant was changed from the Phoenix Chemical Company to IMC Nitrogen).
- 37. The #2 Nitric Acid Plant was built during IMC Nitrogen's ownership and operation of the East Dubuque Nitrogen Production Plant.
- 38. On October 10, 1997, IMC Nitrogen submitted a revised Title V permit application for the East Dubuque Nitrogen Production Plant.

- 39. On April 29, 1999, following the sale of IMC Nitrogen to Royster-Clark Inc., the name, ownership and operation of the East Dubuque Nitrogen Production Plant was changed from IMC Nitrogen to Royster-Clark Nitrogen Inc. (Royster-Clark).
- 40. On November 7, 2002, Royster-Clark submitted an updated Title V permit application and the Title V permit was issued on October 23, 2003.
- 41. In February 2006, Agrium Inc. acquired majority control of Royster-Clark Inc. and merged Royster-Clark Inc. and its subsidiaries into Agrium Inc.
- 42. On April 26, 2006, following the sale of the East Dubuque Nitrogen Production Plant by Agrium to Rentech, Inc., the name, ownership and operation of the East Dubuque Nitrogen Production Plant was changed from Royster-Clark Nitrogen to Rentech Energy Midwest Corporation.
- 43. On August 16, 2006, REMC applied for an administrative amendment to the Title V permit to document the ownership change. The updated Title V permit was issued on September 13, 2006.
- 44. On January 21, 2008, REMC submitted its Title V renewal application.
- 45. Since its construction in 1978 through the present, the #1 Nitric Acid Production Plant has operated as an ammonia-burning nitric acid plant and manufactures weak nitric acid.
- 46. On May 13, 2008, REMC conducted nitrogen oxide (NOx) emissions testing at the #1 Nitric Acid Production Plant.
- 47. On August 12-13, 2008, REMC conducted additional NOx emissions testing at the #1 Nitric Acid Production Plant.
- 48. The #1 Nitric Acid Plant was constructed without a PSD permit and the plant has never had a PSD permit issued subsequent to its construction.

C. FINDING OF VIOLATIONS

NSPS Subpart G

- 49. REMC owns and operates nitric acid production units at the #1 Nitric Acid Production Unit which are affected facilities subject to the Nitric Acid NSPS, 40 C.F.R. Part 60, Subpart G.
- 50. In its May 13, 2008, emissions testing, REMC reported emissions in excess of the 1.5 kilograms NOx per metric ton of acid produced (kg/ton) (3.0 lbs/ton) at the #1 Nitric

Acid Plant.

- 51. In its August 12-13, 2008, emissions testing, REMC reported emissions in excess of the 1.5 kg/ton (3.0 lbs/ton) of NOx at the #1 Nitric Acid Plant.
- 52. In its December 3, 2008, emissions testing report, REMC reported emissions below 1.5 kg/ton (3.0 lbs/ton) of NOx at the #1 Nitric Acid Plant.
- 53. Every day that the #1 Nitric Acid Production Plant was in operation between May 13, 2008 and December 2, 2008, it was in violation of 40 C.F.R. § 60.72(a)(1) of the Nitric Acid NSPS prohibiting NOx emissions greater than 3 lbs per ton of 100% nitric acid produced.
- 54. REMC is in violation of Section 111 of the Act, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subpart G.

Prevention of Significant Deterioration

- 55. REMC owns and operates the # 1 Nitric Acid Production Plant at the East Dubuque Nitrogen Production Plant.
- 56. Beginning in 1978 and continuing through the present, the #1 Nitric Acid Production Plant emitted or had the potential to emit above 100 tons per year or more of NOx.
- 57. The #1 Nitric Acid Production Plant is a "major emitting facility" as defined in Section 169 of the Act, 42 U.S.C. § 7479, and "major stationary source" as defined in the 1978 and current PSD regulations at 40 C.F.R. § 52.21(b)(1), and (b)(1),(i)(a), respectively.
- 58. The #1 Nitric Acid Production Plant is located in Jo Daviess County, Illinois, an area designated as attainment for ozone, NO₂, and fine particles (PM_{2.5}).
- 59. Construction of the #1 Nitric Acid Production Plant commenced after May 3, 1978.
- 60. Prior to commencing construction of the #1 Nitric Acid Production Plant in May, 1978, REMC should have complied with the PSD permitting requirements set forth in the PSD regulations at 40 C.F.R § 52.21, including, 40 C.F.R § 52.21(j) through (r).
- 61. REMC constructed the #1 Nitric Acid Production Plant, a major stationary source, and continues to operate the #1 Nitric Acid Production Plant, without obtaining the proper PSD permit, in violation Sections 110, 165 and 169 of the Act, 42 U.S.C. §§ 7410, 7475 and 7479, and the implementing regulations at 40 C.F.R. § 52.21.
- 62. REMC constructed the #1 Nitric Acid Production Plant, a major modification to the East

Dubuque Nitrogen Production Plant, and continues to operate the #1 Nitric Acid Production Plant, without obtaining the proper PSD permit, in violation Sections 110, 165 and 169 of the Act, 42 U.S.C. §§ 7410, 7475 and 7479, and the implementing regulations at 40 C.F.R. § 52.21.

Title V Operating Permit

- 63. Under the Title V regulations at 40 C.F.R. § 70.2, the terms and conditions of a PSD permit are "applicable requirements."
- 64. Under 40 C.F.R § 70.5, a source subject to the Title V permit requirement must submit a permit application that includes, among other things, all applicable requirements.
- 65. The Title V permit for the #1 Nitric Acid Production Plant does not contain any requirements related to PSD permitting, including BACT.
- 66. The Title V permit application(s) and permit(s) for the #1 Nitric Acid Production Plant do not include all the applicable requirements in violation of 40 C.F.R. § 70.5(c).
- 67. REMC has operated, and continues to operate, the #1 Nitric Acid Plant without a Title V permit that contains all applicable requirements in violation of 40 C.F.R. §§ 70.1(b) and 70.5(c).
- 68. REMC failed to submit corrected information regarding the applicable requirements for the #1 Nitric Acid Production Plant in violation of 40 C.F.R. § 70.5(b).
- 69. REMC has operated, and continues to operate, the #1 Nitric Acid Plant without a compliance plan for all applicable requirements with which it is not in compliance, as well as a schedule for compliance in violation of 40 C.F.R. §70.5(c)(8).
- 70. REMC has operated, and continues to operate, the #1 Nitric Acid Plant without a valid Title V permit in violation of Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and the implementing regulations at 40 C.F.R. Part 70.

 $\frac{10/9/09}{\text{Date}}$

Cheryl L. Newton

Director

Air and Radiation Division

Much

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Notice and Finding of Violation, No. EPA-5-09-IL-20, by Certified Mail, Return Receipt Requested, to:

Mr. John Ambrose President Rentech Energy Midwest Corporation 16675 Highway 20 West East Dubuque, Illinois 61025-0229

I also certify that I sent a Notice and Finding of Violation, No. EPA-5-09-IL-20, by

Certified Mail, Return Receipt Requested, to:

Ray Pilapil, Manager
Bureau of Air
Compliance and Enforcement Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

	1210		October	
on the		day of	Cours	2009.

Betty Williams,

Administrative Program Assistant,

AECAS (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0005 8915 9218